

# Display Software Manual



**Version 5.2.0**  
**April 6, 2017**

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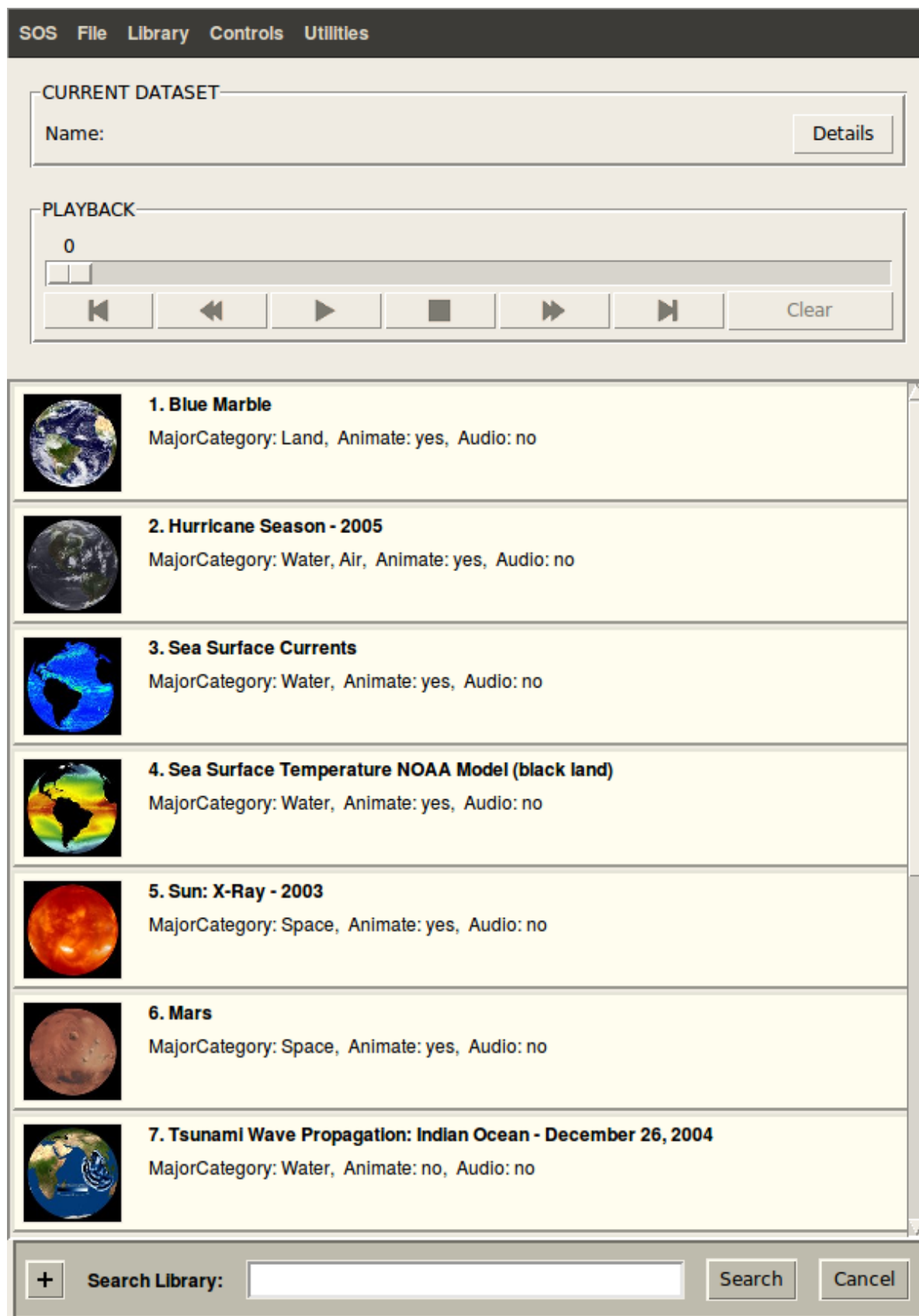
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## Overview

### SOS Stream GUI

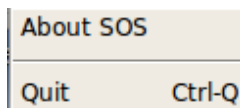
Once you are logged in, find the icon on the Desktop labeled “SOS Start” and double click it. This will bring up the Science On a Sphere® interface, called the SOS Stream GUI. The SOS Stream GUI must be open in order for you to use SOS.

At the top of SOS Stream GUI, you will see five menus: “SOS,” “File,” “Library,” “Controls,” and “Utilities.” Below that is a window with information about the current dataset, buttons similar to those on a DVD player that allow you to control the opened playlist, a list of datasets in the current playlist, and a place at the bottom to search for datasets.



## SOS Menu

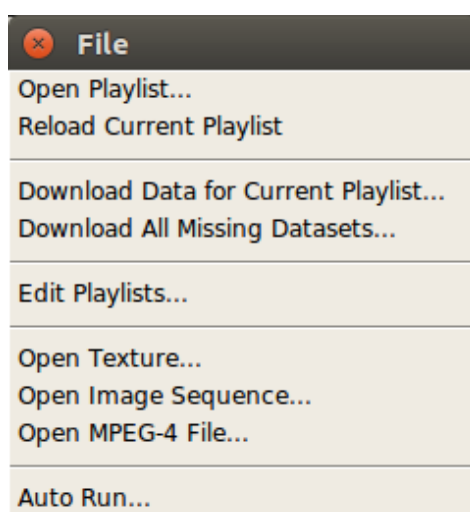
The SOS Menu only has two items.



- **About SOS** will give you the version of SOS that you're currently running. Often if support is required, we'll ask for the version of SOS that you're running.
- **Quit** closes the SOS Stream GUI. You can also close the software using the "x" at the top of the window, the hot key combination Ctrl-Q from the keyboard.

## File Menu

The File menu gives you to options to open, reload or update a playlist, install new data, edit playlists, open data, and turn on Autorun mode.



- The "Open Playlist..." option will open a dialog box where you can select a playlist to open. Any time a modification is made to a playlist, you must reload the playlist in order for the changes to be reflected.
- You can do this with the "Reload Current Playlist" option.
- The "Download Data for Current Playlist..." option will scan through your currently loaded playlist and download any files that are missing. This is a useful feature if you have loaded a playlist with new content that you haven't yet downloaded. By default, all new content from NOAA is updated on your system every Monday.
- The "Download All Missing Datasets..." option is used to download all the datasets in the NOAA data catalog that are not already installed locally. This is useful when NOAA has released a new dataset after a Monday and you want to get it immediately. It is also a convenient way to be sure you have everything available from NOAA on your system. Note that if a lot of datasets are missing on your system, this operation may take a while to complete.
- You can launch the Visual Playlist Editor application using the icon on the desktop or by clicking on the "Edit Playlists..." option in the "File" menu.
- The next three options in the "File" menu, "Open Texture...", "Open Image Sequence...", and "Open MPEG-4 File..." allow you to open either JPEGs, PNGs, or MPEG4s directly, without a playlist file. This is a useful feature for testing new frames or movies.
- The final option is "Auto Run...", which will turn on Autorun mode. When running, a window will appear to let you know that Autorun is on. By default, each dataset in the open playlist will be displayed for three

minutes.

### Library Menu

The Library menu provides access to the datasets, sorted by Major Category, as defined in the SOS Data Catalog, along with a few catalog update options.



- These entries are: Air, Extras, Land, Live\_Programs, People, Snow\_and\_Ice, Space, and Water.
- The “all” item is simply an alphabetical list of every dataset on the SOS system.
- “overlays” contains all the overlay datasets and is needed only for the iPhone app, which doesn’t use the Data Catalog (unlike the iPad app, which does).
- The “Site\_Custom” major category is used for datasets added by a particular SOS site. In order for custom datasets to appear in the SOS Data Catalog, they must be put in a subdirectory of /shared/sos/media/site-custom. Note that Live\_Programs includes datasets with accompanying scripts found at <http://sos.noaa.gov/Datasets/live- programs.php>.
- To update the library, including site-custom, use the “Update Library...” option. This needs to be done every time a new dataset is added to the system.
- Also, if you are using SOS translations (new in version 5.0), the “Perform Translations...” option should be run immediately following Update Library since the translations must be restored after the Data Catalog is updated (see the SOS Translations Guide for further information on how translations are performed in SOS).

### Controls Menu

The Controls Menu provides options for controlling the sphere and gives you the keyboard shortcuts that are available.

Clear	x
Play	p
Stop	s
Toggle Animation	Space
Toggle Z-Rotation	v
Step Fwd	->
Step Back	<-
Beginning	Home
End	End
Frame Delay...	
Sphere Tilt...	
Reset Sphere Tilt	w

- Their function is self-explanatory. In addition, there are a few options for adjusting the display of the current dataset.
- The “Frame Delay...” option allows you to adjust the frames per second, first dwell and last dwell.
- The “Sphere Tilt...” option allows you to adjust the tilt on the x, y, and z axis.
- And the “Reset Sphere Tilt” option will reset the tilt of the sphere. All of these modifications are reflected in real time. Any changes made are not saved. If you like the modifications that you’ve made, you’ll need to set those in your playlist. These options are good for testing out different settings.

## Utilities Menu

The Utilities Menu has a number of special utility options.

View a SphereCast...
Host a SphereCast...
Set Up a Shared PIP...
Load Dataset Translations...
Load Category/Keyword Translations...
Clear All Data Catalog Translations...
Prepare iOS Translations...
Run SOS Diagnostic Utilities...

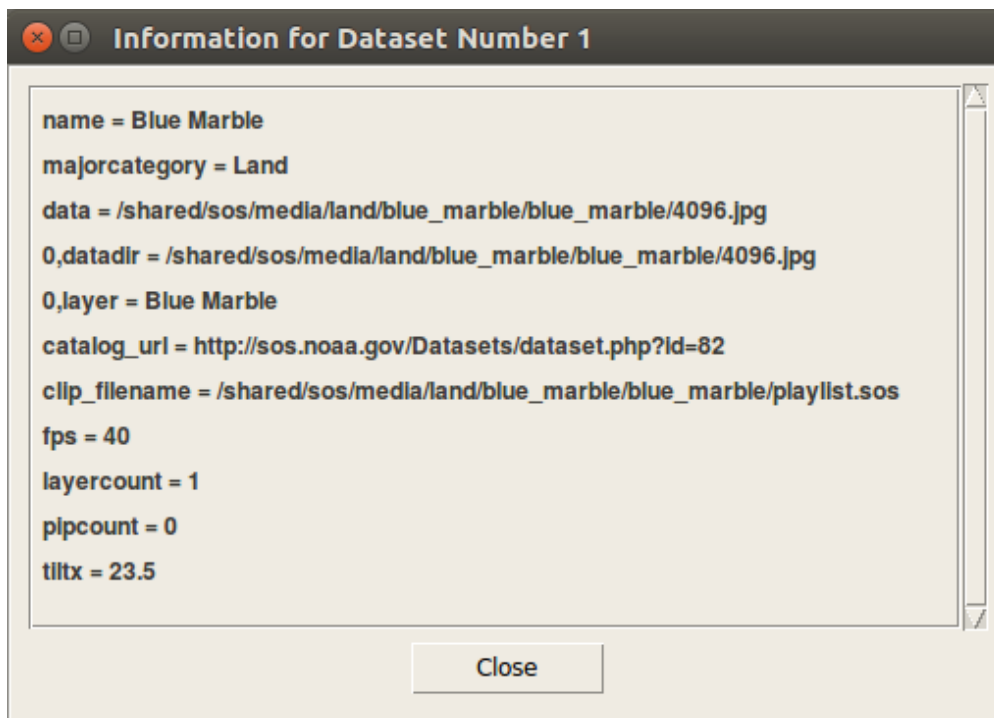
- The “View a SphereCast...” item allows you to connect your SOS system in order to receive SphereCasting commands from a host site.
- Similarly, the “Host a SphereCast...” item is for a site that is hosting a SphereCast. For more information about SphereCasting, visit: <http://sos.noaa.gov/Support/spherecasting.html>
- The “Set Up a Shared PIP...” item allows you to play a live streaming video over a whole playlist of datasets. You can find more information on that feature in the Content Creation section.
- Starting with SOS version 5.0, there are four new Utilities menu items that are used to perform translation tasks for non-English languages. “Load Dataset Translations...” adds dataset name and description translations to the SOS Data Catalog from language- specific playlists,
- “Load Category/Keyword Translations...” adds Keyword, Major Category, and Subcategory translations to the Data Catalog from language-specific comma separated value (csv) files ,
- “Clear All Data Catalog Translations...” removes all translations loaded into the Data Catalog, and
- “Prepare iOS Translations...” creates special translation files used by the iPad and iPhone user interfaces

from language- specific tab separated value (tsv) files. Complete information about how to create and load translations is described in the SOS Language Translation Guide.

- The “Run SOS Diagnostic Utilities...” menu item will open a new window with a number of utilities for troubleshooting your system. This window can also be launched from the “SOS Diagnostics Utilities” icon on your Desktop. You must be logged in as the user sos in order to run the Diagnostic Utilities.

## Dataset Details

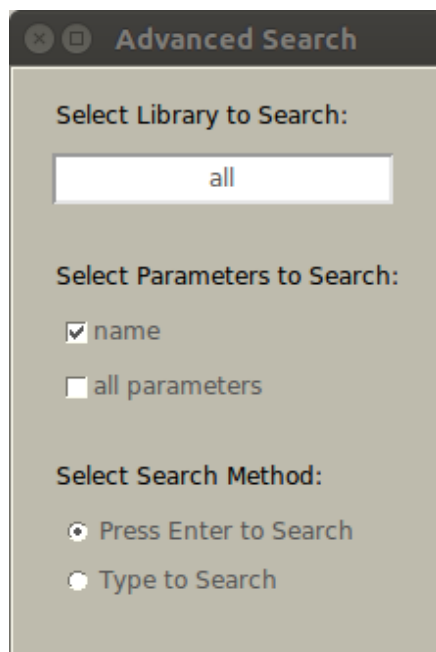
For more information about the currently loaded dataset, click the “Details” button in the SOS Stream GUI. This will open a window with all the parameters that are set for this dataset.



## Searching

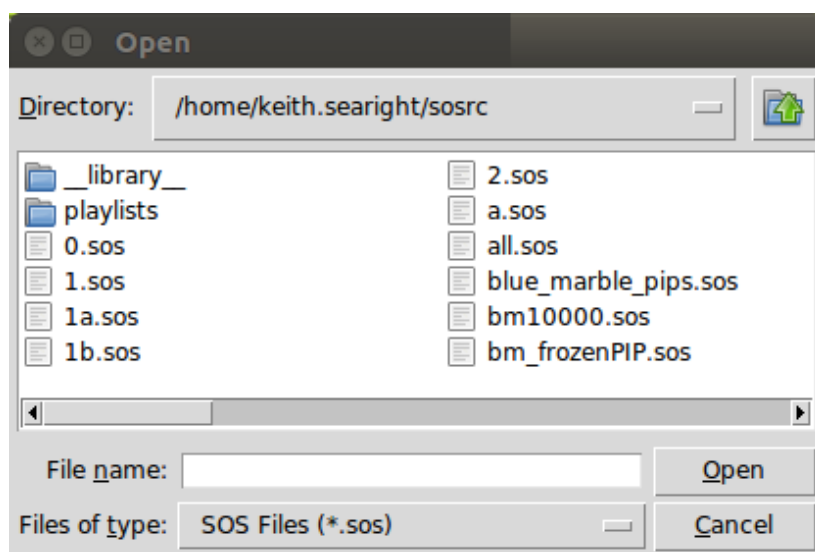
To find a particular dataset, use the Search Bar at the bottom of the SOS Stream GUI to browse through the whole library. A new playlist will open with all the datasets that match your search. To return to your original playlist, simply clear the Search Bar. By default, the search is based on the title of the datasets, but under the advanced search, you can search by title, keywords, and all parameters. To open the advanced search, click on the “+” in the Search Bar.





## Opening a Playlist

A generic playlist, called normal-demo.sos, is automatically opened when the SOS Stream GUI is started. To open a user-generated playlist, click on the “File” menu and select “Open Playlist.” In the window that appears, select the playlist that you would like to use.



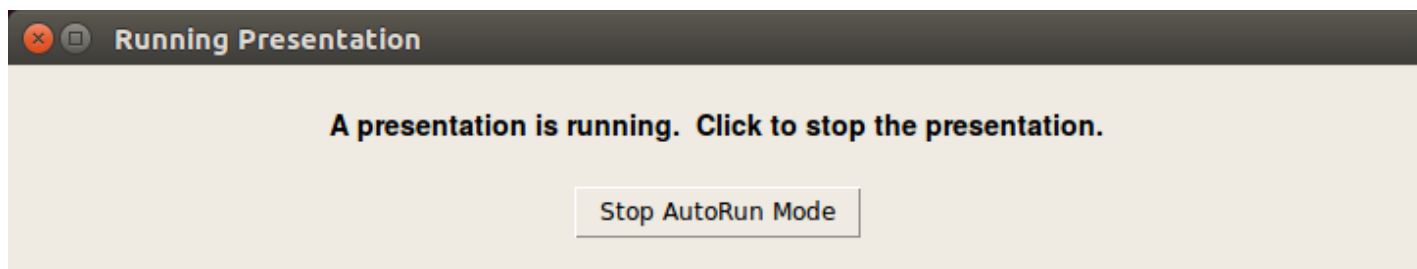
All of the playlists are saved in the directory `/home/sos/sosrc` for the user **sos** and `/home/sosdemo/sosrc` for the user **sosdemo**. If a playlist contains errors, a warning message will pop up with the names of the offending datasets and the paths that they use. Clicking on a dataset in the playlist will load it on the sphere. The dataset bar will turn yellow while loading, and then turn green if it loads properly or red if it is unable to load.

If you make changes to your playlist while it is open, it will not automatically reflect those changes. You will need to reload the playlist by clicking the “Reload Current Playlist” button in the “File” menu.

A playlist can also be opened with the SOS Remote (app for iOS mobile devices) by tapping “Presentation” at the bottom of the app, and then tapping the folder icon in the upper left-hand corner. You can scroll through the available playlists or jump around using the index on the right-hand side. Tapping a playlist will load it.

## Using a Playlist

Once a playlist is open, there are several options for using it. The first is to set the system on Autorun mode. In this mode, the system will run through the playlist on an automatic timer. To turn on Autorun, click “Autorun” under the “File” menu.



In Autorun mode, the system will display each dataset for a default three minutes unless otherwise specified in the playlist. The second option is to control the playlist from the primary computer. To do this you can use the buttons across the top of the window, the commands in the “Control” menu or the keyboard. The buttons across the top of the window are similar to those on a VCR. There is a timeline across the top with a slider bar to indicate the frame number of the dataset. You can move the slider bar around with the mouse to fast forward or fast backward through the dataset. The commands in the “Control” menu provide all the same functions as the buttons across the top. The controls for the keyboard are listed the right side of the commands in the “Control” menu. The most common keyboard commands are the up and down arrows that allow you to move through the selected playlist, and the space bar which pauses and plays the datasets. The third way to control the playlist is by using the SOS Remote app for iOS devices such as iPads and iPhones.